Draft Individual Review Form

Proposal number: 2001-F211-2 **Short Proposal Title:** Keswick Reservoir Sediments Feasibility Study (Phase 1 and 2).

1a) Are the objectives and hypotheses clearly stated?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Five hypotheses are clearly stated on p. 4. The primary objective of the study is not necessarily to test the hypotheses, but to test the feasibility of a remediation alternative (four listed on p. 6) that will be selected by an interagency group.

1b1) Does the conceptual model clearly explain the underlying basis for the proposed work?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Yes, the text on p. 3 and 4 and Figure 2 provide a clear description of the problem related to the Iron Mountain (IMM) Superfund Site.

1b2) Is the approach well designed and appropriate for meeting the objectives of the project?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The administrative approach to reaching a consensus about designing the remedial approach seems reasonable. The proposed study develops an engineering design (p. 7, paragraph 3; p. 14 and 15).

1c1) Has the applicant justified the selection of research, pilot or demonstration project, or a full-scale implementation project?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

It is not clear into what category this proposal falls. There is no research aspect described in any of the eleven tasks (p. 14 and15). There is a pilot/demonstration study briefly described in task 5 to obtain data for subsequent design of ponds and dewatering equipment. It is definitely not a full-scale implementation project. The proponents indicate that full implementation would be budgeted as Phase 3 (Construction) in a later proposal. Therefore most of the resources (the other 10 tasks) appear to involve organization, selection and ultimate design of a remediation alternative for the Spring Creek arm of the Keswick Reservoir to mitigate metal loads to the Sacramento River basin.

1c2) Is the project likely to generate information that can be used to inform future decision making?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

If CALFED needs to oversee the remediation of the Spring Creek arm of the Keswick Reservoir, then this proposal will provide useful information to implement future remediation strategies.

2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

This is difficult to judge prior to the selection of the remediation alternative to be selected by the interagency committee. It is reasonable to assume that task 5 would be adequately designed to monitor the feasibility of the selected alternative based on ongoing water-quality sampling in the vicinity of the Superfund Site (p. 7).

2b) Are data collection, data management, data analysis, and reporting plans well-described, scientifically sound and adequate to meet the proposed objectives?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Monitoring plans and data collection information (p. 7 and Table 1) are understandably vague, because the remediation alternative has not yet been selected, although the isolation and removal of the 250,000 cubic yards of metal-laden sludge from the Spring Creek arm of the Keswick Reservoir is emphasized in the proposal (p. 4). Monitoring plans are specified in Table 1 to test hypotheses 1 to 3, but not 4 and 5. The proponents might mention if the presented monitoring program will be adequate to test hypotheses 4 and 5 as well. Possibly length requirements caused the description of the monitoring plans to lack technical detail (e.g., "monitor surface-water quality" in Table 1 cells).

3) Is the proposed work likely to be technically feasible?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Any one of the four-remediation alternatives (p. 6) could be implemented.

4) Is the proposed project team qualified to efficiently and effectively implement the proposed project?
Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The key personnel (p. 12 and 13) are qualified to coordinate the completion of the eleven proposed tasks (p. 14 and 15).

Miscellaneous comments
[Note: in the electronic version, this will be an expandable field]

Overall Evaluation Summary Rating

- ☐ Excellent
- ☐ Very Good
- ☐ Good
- X Fair
- ☐ Poor

Provide a brief explanation of your summary rating:

Examination and design of possible engineering solutions to mitigate metal discharge into the Sacramento River from the IMM Superfund Site is a useful and laudable endeavor. Because an engineering approach has not yet been selected, let alone designed, this proposal may not yet be appropriately defined for CALFED support. In particular, Phase 1 of the proposal does not seem to fall within any of the funding categories for this program.